

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010601**Date Inspected:** 26-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai**CWI Name:** ZPMC and ABF**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Wai Pau, was present during the times noted above for observations relative to the work being performed.

**Bay#5**

Traveler rails: - Caltrans QA inspector observed ten ZPMC welders performed FCAW process on the flange to web plate of traveler rail #11TR1-018, 11TR1-030, 11TR3-020, 10TR1-015, 10TR1-006, 10TR1-013, 11TR-014, 11TR1-014, 10TR1-008, 11TR1-004, 11TR2-019, 10TR1-007, 11TR2-010, 10TR2-005, 11TR2-017 and 11TR2-006. This type component designed has CJP and PJP weld along on one side of full weld length and other side has CJP only. All the welding areas have been pre heating prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Traveler rails: - Caltrans QA inspector observed two fit up groups performed fit up and SMAW and FCAW tack weld process on the flange to web plate of ten 10TR and 11TR type traveler rails. Each group has two workers and one tack weld welder. During observation, the traveler rails have not been identified by ZPMC at this time. A numerous temporary tack welds have been welded attach to the web after adjusted and secured by template. The fit up and SMAW and FCAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

**Bay#6**

Tower strut: - Caltrans QA Inspector observed a welder performed two spots SMAW noncritical repair weld

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process on the base metal of tower strut. The tower strut weld ID is WD1-A305-77M-1 and WD1A305-53M-1. The two spots SMAW noncritical repair weld located at the surface of weld which has been rejected by ZPMC VT inspection. The depth of repair weld build up is 0.2mm ~ 0.3mm. The SMAW noncritical weld repair is monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

### Bay #2

Floor beam: - Caltrans QA inspector performed final MT inspection on the fillet welds of two floor beams. The fillet welds are attached to six stiffeners. The floor beam and weld ID is

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FB3090-001-030/031/058/059/064/065/072/048/049/060/061/070/071/081/082/006/007/012/013/022/02/011/008/009/020/021/026

and

FB3083-002-011/014/015/024/025/018/019/030/031/039/040/044/043/012/013/022/023/028/029/037/036/046/047.

All the welds have been tested on one side only. The other side is not able to MT test until the plate turn over.  
Base on Caltrans inspection, the fillet welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As notes within report above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pau, Wai	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford, William	QA Reviewer

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